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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,423	06/24/2003	Brian E. Aufderheide	57778US002	9623

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EXAMINER	
WU, XIAO MIN	

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/602,423	AUFDERHEIDE, BRIAN E.	
	Examiner	Art Unit	
	XIAO M. WU	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/23/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US Patent No. 4,931,019) in view of Robercht et al. (US 2004/0233174).

As to claims 1, 13, 15, 21-22, 34-35, Park discloses a system comprising: a film (32, Figs. 2-5) that self-generates an electrical signal in response to an external agent applied to a location on the film (see col. 3, line 56 to col. 4, line 4). It is noted that Park does not specifically discloses a sensor configured to detect the electrical signal at a plurality of positions on the film to determine the location where the external agent is applied to the film. Robercht is cited to teach a touch panel device including a piezoelectric film similar to Park. Robercht further discloses the touch panel including a plurality of sensors (220A, 220B, 220C, 220D, Fig. 2a) configured to detect electrical signal at a plurality of positions on the film to determine the location where the external agent (e.g. pen) is applied to the film. It would have been obvious to one of ordinary skill in the art to have modified Park with the features of the touch sensors as taught by Robercht so that the touch position on the film can be calculated.

As to claims 2, 14, Robercht discloses a controller (page 4, [0036]) coupled to the sensor and adapted to determine the location where the external agent is applied to the film.

As to claim 3, Park discloses the external agent comprises a touch implement (18).

As to claim 4, Park discloses the self-generated electrical signal is generated at the location where the external agent is applied to the film ((see col. 3, line 56 to col. 4, line 4).

As to claims 5, 16, 18, Park discloses the film is piezoelectric (32).

As to claims 6, 17, 19, Park discloses the film is pyroelectric (col. 4, lines 32-34).

As to claim 7, Robercht discloses in a touch sensor (220A-220D) to detect a location of an applied touch.

As to claims 8, 20, 31, Park discloses the system being optically transmissive (col. 4, lines 5-10)

As to claim 9, it would have been obvious to have the touch panel being optically opaque, if the touch panel stands alone and not overlay to the display.

As to claims 10-11, Park discloses that the system wherein the self-generated signal is an electric current or a voltage (see Fig. 3).

As to claim 12, Robercht discloses one electrodes disposed on at least one side of the film (see Fig. 5).

As to claims 23-24, Robercht discloses the touch sensor is stressed under the influence of a discrete touch (page 3, [0035]).

As to claim 25, Robercht discloses touch sensor being combined with a display (190, Fig. 1).

As to claim 26, Robercht discloses the touch sensor further comprising one or more electrically continuous electrodes disposed on at least one side of the film (see Fig. 5).

As to claims 27-29, it would have been obvious to have different number of the electrodes on the film based on a desired touch sensitivity.

As to claim 30, Park discloses one additional film where each additional film (34) has the property of self-generating a signal in response to the touch implement where the signal generated by each additional film can be generated at the touch location.

As to claim 32, Park discloses using an indium tin oxide electrode (col. 3, line 54).

As to claim 33, Park discloses an optically transmissive conductive polymer (34).

Response to Arguments

3. Applicant's arguments filed 6/13/2006 have been fully considered but they are not persuasive.

Applicant argues that Robercht does not disclose detecting an electrical signal at a plurality of positions on a film that is self-generating an electrical signal in response to an applied external agent. These arguments are not persuasive because the main referent to Park clearly teaches that the film (32, Fig. 3) is capable of self-generating an electrical signal in response to an applied external agent such as an external force 40, and the secondary reference to Robercht suggests that a plurality touch sensors (220A... 220D) are positioned in a plurality of positions (e.g. four corners) on a touch surface (210) for detecting the touch position. It would have been obvious to have placed sensors of Robercht on the film of Park such that the touch point can be detected through the vibration caused by the force. It is believed that the broadly claimed structures are still met by the combination of the references to Park and Robercht.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.
August 27, 2006

XIAO M. WU
Primary Examiner
Art Unit 2629